

Oh Deer! Population Lab

Procedure

YOU WILL ALWAYS RECORD THE POPULATION OF BOTH THE WOLF AND THE DEER AT THE START OF EACH ROUND!

1. Place 3 deer cards within the habitat. Record prey data in Generation 1.
2. Take 1 wolf card. Record data in Generation 1.
3. Toss the wolf card and attempt to catch as many deer as possible. If the wolf touches any deer remove the deer from the habitat. A wolf must catch 3 deer in order to survive.
4. The deer population doubles each generation. So each remaining deer in the habitat doubles. Place the necessary amount of deer cards into the habitat.
5. The wolf most likely will die in round 1, that's okay. Another wolf will move into the habitat. Therefore there will always at least 1 wolf in the habitat.
6. Record the new number of deer and wolves for Generation 2.
7. Toss the wolf card again and attempt to catch as many deer as possible. If the wolf touches any deer remove the deer from the habitat. A wolf must catch 3 deer in order to survive.
8. The deer population doubles each generation. So each remaining deer in the habitat doubles. Place the necessary amount of deer cards into the habitat.
9. If a wolf catches 3 deer it survives and reproduces 1 more wolf. If a wolf catches 6 deer it survives and reproduces 2 more wolves.
10. Record the new number of deer and wolves for Generation 3.
11. Continue the procedure for Generations 3-15. Remember you need to toss each individual wolf for each round. So you may have to toss 10 or more different wolves in one round. Also remember if a wolf catches 3 deer it survives and reproduces 1 more wolf. If a wolf catches 6 deer it survives and reproduces 2 more wolves.

NOTE: The carrying capacity of the deer population in 200.

Generation	Number of DEER at start	Number of WOLVES at start
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Population Simulation Lab Response Questions

1. What happens to the wolf population when the deer population increases?
2. How would you expect an increasing wolf population to affect the deer population?
3. Do both species depend on each other for survival? Explain your answer.

4. How can you tell that the wolf feed almost exclusively on deer?

5. What do you think the limiting factor is for the deer? What do you think the limiting factor is for the wolf?

6. Predict what you think will happen in the next 10 generations of deer and wolves. Base your prediction on your data and graph.